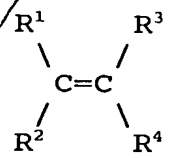
IN THE CLAIMS

Please add the following new Claims:

--21. The process of Claim 1, wherein at least one of said monomers are of the formula:



wherein at least one of R^1, R^2, R^3 and R^4 are selected from the group consisting of halogen and $YC(=Y)R^8$; where Y may be NR^8 or O, and R^8 is H, straight or branched C_1-C_{20} alkyl or aryl; and

said process further comprises a second polymerizing step conducted prior to said isolating step, conducted in the presence of said transition metal compound and said ligand.

22. The process of Claim 21, wherein at least one of R^1, R^2, R^3 and R^4 are chlorine or bromine.

23. A graft copolymer prepared by the process of Claim 21.

24. A hyperbranched or dendritic copolymer prepared by the process of Claim 1.

25. A homopolymer of the formula:

$$R^{11}R^{12}R^{13}C-(M^1)_p-X$$

$$X-(M^1)_p-(R^{11}R^{12}R^{13}C)-(M^1)_p-X \text{ or}$$

$$(R^{11'}R^{12'}R^{13'}C)-[(M^1)_p-X]_z$$

wherein:

X is selected from the group consisting of Cl, Br, I, OR^{10}, SR^{14}, SeR^{14}, $O-N(R^{14})_2$, $S-C(=S)N(R^{14})_2$, H, OH, N_3, NH_2, COOH and $CONH_2$, where

R^{10} is alkyl of from 1 to 20 carbon atoms in which each of the hydrogen atoms may be independently replaced by halide, R^{14} is aryl or a straight or branched C_1-C_{20} alkyl group, and where an $N(R^{14})_2$ group is present, the two R^{14} groups may be joined to form a 5- or 6-membered heterocyclic ring,

R^{11}, R^{12} and R^{13} are each independently selected from the group consisting of H, halogen, C_1-C_{20} alkyl, C_3-C_8 cycloalkyl, $C(=Y)R^5$, $C(=Y)NR^6R^7$, COCl, OH, CN, C_2-C_{20} alkenyl, C_2-C_{20} alkynyl oxiranyl, glycidyl, aryl, heterocyclyl, aralkyl, aralkenyl, C_1-C_6 alkyl in which from 1 to all of the hydrogen atoms are replaced with halogen and C_1-C_6 alkyl substituted with from 1 to 3 substituents selected from the group consisting of C_1-C_4 alkoxy,

aryl, heterocyclyl, $C(=Y)R^5$, $C(=Y)NR^6R^7$, oxiranyl and glycidyl, where

R^5 is alkyl of from 1 to 20 carbon atoms, alkoxy of from 1 to 20 carbon atoms, aryloxy or heterocyclyloxy; and

R^6 and R^7 are independently H or alkyl of from 1 to 20 carbon atoms, or R^6 and R^7 may be joined together to form an alkylene group of from 2 to 5 carbon atoms, thus forming a 3- to 6-membered ring,

such that no more than two of R^{11}, R^{12} and R^{13} are H,

M^1 is a radically polymerizable monomer,

p is independently selected such that the number average molecular weight of the homopolymer is from 1,000 to 1,000,000 g/mol; and

$R^{11'}$, $R^{12'}$ and $R^{13'}$ are the same as R^{11}, R^{12} and R^{13} with the proviso that $R^{11'}$, $R^{12'}$ and $R^{13'}$ combined contain from 2 to 5 X groups, where X is as defined above; and

z is from 3 to 6.--

IN THE ABSTRACT

Line 17, after "star,", insert --graft, hyperbranched, dendritic--.